



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-------------------------|----------------|----------------------|---------------------|-----------------|
| 09/304,406 | 05/04/1999 | RALPH E. SIPPLE | 33012/263/10 | 9618 |
| 27516 7 | 590 12/29/2004 | * | EXAMINER | |
| UNISYS CORPORATION | | | LONSBERRY, HUNTER B | |
| MS 4773 PO BOX 64942 | 2 | | ARTUNIT | PAPER NUMBER |
| ST. PAUL, M | N 55164-0942 | | 261 1 | |

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|---|---|--|--|--|
| | 09/304,406 | SIPPLE ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Hunter B. Lonsberry | 2611 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 09 J | luly 2004. | | | | |
| 2a) ☐ This action is FINAL . 2b) ☐ This | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) ⊠ Claim(s) <u>1-25</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-25</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or | awn from consideration. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E | | - | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date | Paper No(s)/Mail Date of Informal F | ate Patent Application (PTO-152) | | | |

Art Unit: 2611

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/9/04 have been fully considered but they are not persuasive.

Applicant argues the combination of Baker and Otani fails to each a transaction server coupled to a number of video servers (response page 13)

Regarding applicants argument, the examiner has dropped the Otani reference and relies instead on additional portions of Baker to teach a transaction server coupled to a number of video servers (figure 3, column 10, lines 37-54).

Applicant argues that the rejection does not address the spooling limitation in claim 5 in the Baker citation (column 7, lines 45-55), (response page 15).

Regarding applicants argument,

http://www.webopedia.com/TERM/s/spooling.html defines spooling as an acronym for simultaneous peripheral operations on-line, spooling refers to putting jobs in a buffer, a special area in memory or on a disk where a device can access them when it is ready. In the previous office action, the incorrect portion of Baker was cited, however Baker addresses spooling at column 8, line 61-column 9, line 3 in which Baker discloses that the video files are loaded into temporary memory buffers 38.

Art Unit: 2611

Applicant argues that Baker and Otani fail to address limitations D/E of claim 6, (response pages 15-16)

Regarding applicant's argument, the examiner directs the applicant to the additional citations of Baker, namely Figures 2-3, and column 10, lines 37-54 for discussion of the transaction server and video server functions. Baker discloses that video servers 12 are controlled and load balanced by a transaction server 54. Server 54 also receives subscriber VOD requests and transmits the requests to the respective video server 12, which in turn retrieves the programming and transmits it onto network 20 to a receiver 22.

Regarding applicants request for documentary evidence regarding the examiners official notice regarding a middleware environment in claim 8 (response page 16), the examiner has substituted U.S. Patent 5,826,085 to Bennett.

Regarding applicants arguments on pages 17-20 of the response, the examiner directs the applicant to additional citations of Baker found in their respective claims, namely Figures 2-3, and column 10, lines 37-54 for discussion of the transaction server and video server functions. Baker discloses that video servers 12 are controlled and load balanced by a transaction server 54. Server 54 also receives subscriber VOD requests and transmits the requests to the respective video server 12, which in turn retrieves the programming and transmits it onto network 20 to a receiver 22.

Art Unit: 2611

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,6 and 11-24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,583,561 to Baker

Regarding claim 1, Baker discloses in Figure 1-3 a video on demand system for supplying video data to a plurality subscriber receivers 22 via a program delivery network, the improvement comprising:

A data base storage system 10 (video server 12 coupled to disks 10, column 10, lines 44-46) containing a plurality of video on demand programs;

A temporary video storage memory 38 (figure 2, column 8, line 61-column 9, line 3, 54-58);

A transaction server 54 (column 10, lines 37-64) responsively coupled to said data base storage system 12, said temporary video storage memory 38, and said plurality of subscriber receivers 22 whereby each of said plurality subscriber receivers requests a different video on from said transaction server and said transaction server spools said different video on data base storage to said

Art Unit: 2611

temporary demand programs from said video storage memory (column 7, lines 45-55, column 9, lines 1-4); and

A plurality of video servers 12 (figure 3) responsively coupled to said transaction server 54 and said plurality of subscriber receivers 22 via said program delivery network wherein said plurality of video servers are assigned by said transaction server to stream said spooled different video on demand programs from said temporary video storage memory to said plurality of plurality of video servers subscriber receivers via said program delivery network (column 10, lines 37-64).

Regarding claim 6, Baker discloses in Figures 1-3, an apparatus comprising:

A plurality of subscribing receivers 22, each capable of providing a plurality of service requests (column 6, lines 12-37, column 8, lines 19-24)

A data base storage system 10 (video server 12 coupled to disks 10, column 20, lines 44-46) containing a plurality of video on demand programs;

A temporary digital storage memory 38 (figure 2, column 8, line 61-column 9, line 3, 54-58);

A transaction server 54 (column 10, lines 37-64) responsively coupled to said data base storage system 12 and said plurality of subscriber receivers 22, capable of receiving said plurality of service requests, accessing said plurality of video programs corresponding to the service requests from said database

Art Unit: 2611

storage system (column 7, lines 45-55, column 9, lines 1-4); spooling into memory 38 (column 8, line 61-column 9, line 3, 54-58); and

A plurality of video servers 12 (figure 3) responsively coupled to said transaction server 54 and said plurality of subscriber receivers 22 via said program delivery network wherein said plurality of video servers are assigned by said transaction server to stream said spooled different video on demand programs from said temporary video storage memory to said plurality of plurality of video servers subscriber receivers via said program delivery network (column 10, lines 37-64).

Regarding claim 11, Baker discloses a VOD system in figures 1-3 comprising:

Storing means 10 for storing a plurality of video programs (column 20, lines 44-46);

Plurality of generating means 22 for generating a plurality of different requested video on demand signals (column 6, lines 12-37, column 8, lines 19-24);

Identifying means 54 (column 10, lines 53-60) responsively coupled to said generating means and said storing means 10 for identifying a number of said plurality of video programs stored within said storing means corresponding to said plurality of different requested video on demand signals;

Spooling means 38 responsively coupled to said identifying means and said storing means for spooling said corresponding number of said plurality of

Art Unit: 2611

video programs which said identifying means identifies (column 8, line 61-column 9, line 3, 54-58) and

A plurality of streaming means 18 (column 10, lines 40-44) responsively coupled said spooling means and said receiving means for streaming said spooled number of said plurality of video programs corresponding to said plurality of different requested video on demand signals to said plurality of generating means 22 wherein said spooling means assigns one or said plurality of streaming means to stream said spooled number of said plurality of video programs to said plurality of generating means (column 10, lines 44-64).

Regarding claim 12, Baker discloses that a subscriber receives the VOD program on a receiver (decoder 22, column 8, lines 18-41).

Regarding claim 13, Baker discloses that video server 12 or Control server 54 acts as a transaction gateway (column 7, lines 28-55, Figure 4, column 10, line 56-column 11, line 22).

Regarding claim 14, Baker discloses that video server 54 processes subscriber transactions (column 10, lines 54-64).

Regarding claim 15, Baker discloses that video server 12 is a Unisys mainframe (column 8, lines 42-48).

Art Unit: 2611

Regarding claim 16, Baker discloses a method of providing video on demand services (figure 8) comprising:

Storing a plurality of video programs in a video storage facility 10 (column 6, lines 37-49);

Receiving a video on demand request from a subscriber 22 at a transaction server 54 (column 10, lines 54-64);

Determining a one of said plurality of video programs corresponding to said video on demand request (column 10, lines 54-64);

Spooling said one of said plurality of video programs corresponding to said video on demand request from said video storage facility 10 into a temporary storage facility 38 (column 8, line 61-column 9, line 3, 54-58);

Assigning one of a plurality of video servers 12 responsively coupled to subscriber to stream said one of said plurality of video programs corresponding to said video on demand request to said subscriber (column 10, lines 54-64); and

Streaming said spooled video program from said temporary video server to said storage facility by said assigned subscriber (column 10, lines 54-64).

Regarding claim 17, Baker discloses that the VOD stream may be paused in response to a viewer command (column 12, lines 7-17).

Regarding claim 18, Baker discloses that the VOD stream may be rewound in response to a viewer command (column 12, lines 7-17).

Art Unit: 2611

Regarding claim 19, Baker discloses in Figure 8, that a user make issue a forward request 132 (column 16, lines 5-9).

Regarding claim 20, Baker discloses that video server 12 performs subscriber accounting and bills a subscriber for a VOD program request (column 7, lines 33-51).

Regarding claim 21, Baker discloses an apparatus for delivering video on demand programs to a plurality of requesters 22 comprising:

a software controlled transaction server 54 responsively coupled to said plurality of requesters 22 which manages an interface between said apparatus and said plurality of requesters (column 10, lines 54-64);

a storage facility 10, which contains a plurality of video programs (column 6, lines 37-49);

a temporary memory 38 (column 8, line 61-column 9, line 3, 54-58) wherein said software controlled transaction server 54 spools a requested one of said plurality of video programs requested by one of said plurality of requesters (column 10, lines 54-64);

a plurality of video servers 12 (column 10, lines 38-44) from which said software controlled transaction server 54 assigns a particular one of said plurality of video servers 12 wherein said particular one of said plurality of video servers streams said requested one of said plurality of video programs from said

Art Unit: 2611

temporary memory to said one of said plurality of requesters (column 10, lines 54-64).

Regarding claim 22, Baker discloses a plurality of video program sources 10 responsively coupled to said software controlled transaction server which stores said plurality of video programs from said plurality of program sources in said storage facility (figures 1-3).

Regarding claim 23, Baker shows in figure 1, a network 20, from which video server 12 streams video from storage 10 to decoder 22.

Regarding claim 24, Baker shows that requests originate from subscriber STB 22 (column 10, lines 56-64).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 2-5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,583,561 to Baker in view of U.S. Patent 5,826,085 to Bennett.

Art Unit: 2611

Regarding claim 2, Baker discloses a VOD system.

Baker does not disclose a transaction gateway in a middleware environment and a video server frame and stream spooling program coupled to the transaction gateway in a middleware environment.

Bennett discloses in Figure 2, a VOD system with a gateway server 220 coupled to a media server 232 which runs a VOD server 234, all of which are interconnected via a CORBA middleware environment 226 (column 5, lines 9-56). Corba provides an interoperability environment, which enables applications on different machines to be seamlessly interconnected (column 5, lines 34-40).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Baker to utilize the middleware environment of Bennett thus enabling applications on different machines to be seamlessly interconnected.

Regarding claim 3, Baker discloses that video server 12 may be a mainframe system (column 8, lines 43-51) and discloses in Figure 3 that the mainframe (video server 12) may be coupled to a transaction server 54 (control server 54, column 10, lines 38-63), additionally the mainframe can act as a transaction server in of itself (column 7, lines 28-55).

The combination of Baker and Bennett does not disclose if Transaction server 54 is a mainframe.

Art Unit: 2611

The examiner takes official notice that using a mainframe computer as a transaction server is notoriously well known in the art. Mainframe computers have a robust architectures enabling them to handle simultaneous requests from a very large number of users at the same time.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the server 54 of the combination of Baker and Bennett to be a mainframe server thus enabling the server to handle simultaneous requests from a very large number of users at the same time.

Regarding claim 4, Baker discloses that video server 12 may be a Unisys mainframe system (column 8, lines 43-51).

Regarding claim 5, Baker discloses that the transaction server may spool the video (column 8, line 61-column 9, line 3) and that the format can be MPEG 2 (column 7, lines 9-16).

Regarding claim 7, Baker discloses that video server 12 performs subscriber accounting and bills a subscriber for a VOD program request (column 7, lines 33-51).

Regarding claim 8 see claim 2.

Art Unit: 2611

Regarding claim 9, Baker discloses that the transaction server may spool the video (column 7, line 45-55) and that the format can be MPEG 2 (column 7, lines 9-16).

Regarding claim 10, Baker discloses that video server 12 may be a Unisys mainframe system (column 8, lines 43-51). See claim 3.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,583,561 to Baker in view of U.S. Patent 6,678,891 to Wilcox.

Regarding claim 25, Baker discloses a VOD ordering system.

Baker fails to disclose enabling a requester to request delivery of a pizza.

Wilcox discloses in figures 30-47 a pizza delivery application, which enables a user to order a pizza, thus enabling a user to order a pizza without making a telephone call.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Baker to include the pizza-ordering interface of Wilcox, thus enabling a user to order a pizza without making a telephone call.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

Art Unit: 2611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HBL

CHRIS GRANT PRIMARY EXAMINER